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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/819,911	03/28/2001	Daniel Crosson	10006946-1	4361

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HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P. O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER	
VU, THONG H	

ART UNIT	PAPER NUMBER
2142	

DATE MAILED: 09/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/819,911	CROSSON, DANIEL	
	Examiner	Art Unit	
	Thong H. Vu	2142	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 July 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-53* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-53* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. Claims 1-53 are pending.

Response to Arguments

2. Applicant's arguments with respect to claims 1-53 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4,6-12,17,19-36,39-53 are rejected under 35 U.S.C. 102(e) as being anticipated by Neves et al [Neves 6,691,227 B1].

3. As per claim 1, Neves discloses a method for Internet protocol (IP) address selection, comprising the steps of:

assigning a single domain name (i.e.: LAN, intranet) to a set of server IP addresses corresponding to plural servers [Neves, domain name service, col 2 lines 51; LAN, col 1 line 30; plural or different servers, col 6 line 17];

receiving a request for the domain name from a client IP address [Neves, connection request, col 8 line 43, Fig 6];

retrieving a set of IP routes linking the server IP addresses and the client IP address [Neves, the NAT with client's address and server's address, col 6 lines 19-31];

selecting an IP route from the set of routes which meets predetermined criteria [Neves, select another host during link establishment process, col 12 lines 1-24; or receiving a notification about client address and server address for the connection, col 12 line 65-col 13 line 15; predetermined criteria or policy, col 16 lines 20-30].

4. As per claims 2,11 Neves discloses retrieving the set of IP routes from a cache database [Neves, the NAT with client's address and server's address, col 6 lines 19-31].

5. As per claims 3,12 Neves discloses retrieving the set of IP routes from an IP routes database [Neves, the NAT with client's address and server's address, col 6 lines 19-31].

6. As per claim 4, Neves discloses retrieving the set of IP routes from a set of routers using a BGP protocol as inherent feature of routers [Neves, routers, col 8 line 23].

7. As per claim 6, Neves discloses retrieving the set of IP routes from a set of routers using a Telnet protocol [Neves, Telnet, col 12 line 23].

8. As per claim 7, Neves discloses selecting the IP route from the set which has a shortest AS path (Autonomous System) as inherent feature of routers.

9. As per claim 8, Neves discloses selecting the IP route from the set which has a lowest origin type as inherent feature of routers.

10. As per claim 9, Neves discloses selecting the IP route from the set which has a lowest MED (Multi-Exit-Disc) as inherent feature of routers.

11. As per claim 10, Neves discloses selecting the IP route from the set equal to a default IP address as inherent feature of routers.

12. As per claim 14, Neves discloses transmitting an IP address from the set of server IP addresses which corresponds to the selected IP route [Neves, server's address, col 6 lines 19-31].

13. As per claim 25 contains the similar limitations set forth in claim 1. Therefore claim 25 is rejected for the same rationale set forth in claim 1.

14. As per claim 26, Neves discloses a cache database, coupled to the domain name server for storing previously selected IP routes [Neves, the NAT with client's address and server's address, col 6 lines 19-31].

15. As per claim 27, Neves discloses the IP routes database is for storing all of the IP routes [Neves, the NAT with client's address and server's address, col 6 lines 19-31].

16. As per claim 28, Neves discloses a domain name system server includes an enhanced address resource record storing the single domain name, a list of the servers and routers, a set of

router retrieval parameters, a default IP router; and the domain name system server accesses the retrieval parameters in order to select the IP routes [Neves, the NAT with client's address and server's address, col 6 lines 19-31].

17. As per claim 29, Neves discloses the client IP address corresponds to a client and the set of server IP addresses correspond to respective servers, wherein the set of IP routes comprises IP routes from the client to respective servers, and wherein selecting the IP route comprises selecting the IP route corresponding to the server that satisfies the predetermined criteria [Neves, select another host during link establishment process, col 12 lines 1-24; or receiving a notification about client address and server address for the connection, col 12 line 65-col 13 line 15; predetermined criteria or policy, col 16 lines 20-30].

18. As per claim 30, Neves discloses selecting the IP route to the server associated with a shortest path from the client.

19. As per claim 31, Neves discloses the assigning, receiving, retrieving, and selecting acts are performed by a domain name system (DNS) server [Neves, domain name server, col 2 lines 51.

20. As per claim 32, Neves discloses retrieving a set of IP routes where each IP route is defined by at least two IP addresses [Neves, the NAT with client's address and server's address, col 6 lines 19-31].

21. As per claim 33, Neves discloses prior to retrieving the set of IP routes, checking a database in a cache to find an IP route entry containing an IP route previously indicated as being a best IP route; and in response to finding the IP route entry in the cache, using the IP route previously indicated as being the best IP route as the selected IP route [Neves, available for assignment, col 13 lines 30-45].

22. As per claim 34, Neves discloses retrieving the set of IP routes is performed from an IP routes database, and wherein retrieving the set of IP routes from the IP routes database is in response to determining that the IP route entry is not present in the cache [Neves, not yet been updated, col 9 line 64-col 10 line 12].

23. As per claim 35, Neves discloses accessing a field in a record, the field to indicate one of plural techniques for downloading IP routes from routers to the DNS server; and based on the technique identified by the field, establish one or more sessions with the routers to download IP routes from the routers into an IP routes database in the DNS server, wherein retrieving the set of IP routes is performed from the IP routes database as inehrente feature of DNS connect to Internet [Neves, Internet, col 6 line 2].

24. As per claim 36, Neves discloses establishing one or more Border Gateway Protocol (BGP) sessions with the routers to download IP routes from the routers into the IP routes database, in response to the field indicating use of BGP retrieval [Neves, routers, col 8 line 23].

25. As per claim 39, Neves discloses establishing one of plural different types of sessions corresponding to the one of plural techniques specified by the field to download IP routes from the routers into the IP routes database [Neves, the NAT with client's address and server's address, col 6 lines 19-31].

26. Claims 15-17,19-24;40-48 and 25-28,49-53 contain similar limitations set forth in claims 1-4,6-12,14,29-36,39. Therefore claims 15-17,19-24;40-48 and 25-28,49-53 are rejected for the same rationale set forth in claims 1-4,6-12,14,29-36,39.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 5,13,18,37-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neves et al [Neves 6,691,227 B1] in view of Dynarski et al [Dynarski 6,272,129 B1].

27. As per claims 5,18 Neves discloses retrieving the set of IP routes from a set of routers [Neves, routers, col 8 line 23].

However Neves does not explicitly detail "using an SNMP protocol".

In the same endeavor, Dynarski discloses a method for allocation wireless mobile nodes over Internet network including SNMP and Telnet [Dynarski, col 14 lines 1-7].

Therefore it would have been obvious to an ordinary skill in the art at the time the invention was made to incorporate the SNMP and Telnet services as taught by Dynarski into the Neves's apparatus in order to utilize the DART network interacts with other technologies. Doing so would provide a simple, efficient and automatic way of permitting the terminal on the IP network to initiate communication with the wireless device [Dynarski, col 2 lines 15-26].

28. As per claim 13, Neves-Dynarski disclose defining an enhanced address resource record, including a domain name, a list of corresponding servers and routers, router retrieval parameters, a default client/server IP route, and timeouts [Dynarski, IP link, col 8 lines 9-18; Dormant state, col 13 lines 4-8, domain, col 16 lines 50-67].

29. As per claims 37, Neves-Dynarski disclose establishing one or more Simple Network Management Protocol (SNMP) sessions with the routers to download IP routes from the routers into the IP routes database, in response to the field indicating use of Management Information Base (MIB) [Dynarski, SNMP, col 14 lines 1-7].

30. As per claim 38, Neves-Dynarski disclose establishing one or more Telnet sessions with the routers to download IP routes from the routers into the IP routes database [Neves, database, 0119; Web page, 0057], in response to the field indicating use of Telnet retrieval [Dynarski, Telnet, col 14 lines 1-7].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hericourt [6,792,461 B1] in view of Kidder et al [Kidder 6,880,0856].

31. As per claim 1, Hericourt discloses a method for Internet protocol (IP) address selection, comprising the steps of:

assigning a (single) domain name to a set of server IP addresses corresponding to plural servers [Hericourt, Domain name service, col 3 lines 30-36;

receiving a request for the domain name from a client IP address;

retrieving a set of IP routes linking the server IP addresses and the client IP address [Hericourt, client address and server address, col 20 lines 15-21];

selecting an IP route from the set of routes which meets predetermined criteria [Hericourt, select the ALP policing definition table [Hericourt, col 19 line 12-col 20 line 51].

Hericourt does not explicitly detail a single domain. It was well-known in the art that was a design choice as taught by Kidder [SNMP, a single domain and NMS servers, col 13 lines 5-48]

Therefore it would have been obvious to an ordinary skill in the art at the time the invention was made to incorporate a single domain with plural servers as taught by Kidder into

the Hericourt's apparatus in order to utilize the domain name service via Internet. Doing so would improve the performance of web services [Hericourt, col 7 lines 23-30]

32. As per claims 2,11 Hericourt-Kidder disclose retrieving the set of IP routes from a cache database [Hericourt, internal cache, col 4 lines 33-40].

33. As per claims 3,12 Hericourt-Kidder disclose retrieving the set of IP routes from an IP routes database.

34. As per claim 4, Hericourt-Kidder disclose retrieving the set of IP routes from a set of routers using a BGP protocol as inherent feature of router.

35. As per claim 6, Hericourt-Kidder disclose retrieving the set of IP routes from a set of routers using a Telnet protocol [Hericourt, Telnet, col 2 line 28].

36. As per claim 7, Hericourt-Kidder disclose selecting the IP route from the set which has a shortest AS path (Autonomous System) [Hericourt, minimize the path, col 7 lines 32-40].

37. As per claim 8, Hericourt-Kidder disclose selecting the IP route from the set which has a lowest origin type as a design choice.

38. As per claim 9, Hericourt-Kidder disclose selecting the IP route from the set which has a lowest MED (Multi-Exit-Disc) as a design choice.

39. As per claim 10, Hericourt-Kidder disclose selecting the IP route from the set equal to a default IP address as a design choice.

40. As per claim 14, Hericourt-Kidder disclose transmitting an IP address from the set of server IP addresses which corresponds to the selected IP route [Hericourt, a list of server, col 15 lines 8-13].

41. As per claim 25 contains the similar limitations set forth in claim 1. Therefore claim 25 is rejected for the same rationale set forth in claim 1.

42. As per claim 26, Hericourt-Kidder disclose a cache database, coupled to the domain name server for storing previously selected IP routes [Hericourt, internal cache, col 4 lines 33-40].

43. As per claim 27, Hericourt-Kidder disclose the IP routes database is for storing all of the IP routes [Hericourt, a list of server, col 15 lines 8-13].

44. As per claim 28, Hericourt-Kidder disclose a domain name system server includes an enhanced address resource record storing the single domain name, a list of the servers and

routers, a set of router retrieval parameters, a default IP router; and the domain name system server accesses the retrieval parameters in order to select the IP routes [Hericourt, Domain Name service, col 3 lines 32-37].

45. As per claim 29, Hericourt-Kidder disclose the client IP address corresponds to a client and the set of server IP addresses correspond to respective servers, wherein the set of IP routes comprises IP routes from the client to respective servers, and wherein selecting the IP route comprises selecting the IP route corresponding to the server that satisfies the predetermined criteria [Hericourt, a list of server, col 15 lines 8-13; Web policy, col 7 lines 4-15]].

46. As per claim 30, Hericourt-Kidder disclose selecting the IP route to the server associated with a shortest path from the client [Hericourt, minimize the path, col 7 lines 32-40].

47. As per claim 31, Hericourt-Kidder disclose the assigning, receiving, retrieving, and selecting acts are performed by a domain name system (DNS) server [Hericourt, Domain Name service, col 3 lines 32-37].

48. As per claim 32, Hericourt-Kidder disclose retrieving a set of IP routes where each IP route is defined by at least two IP addresses [Hericourt, client address-server address, col 16 lines 20-34].

49. As per claim 33, Hericourt-Kidder disclose prior to retrieving the set of IP routes, checking a database in a cache to find an IP route entry containing an IP route previously indicated as being a best IP route; and in response to finding the IP route entry in the cache, using the IP route previously indicated as being the best IP route as the selected IP route [Hericourt, ALP policing Configuration table, col 16 line 35-col 17 line 20].

50. As per claim 34, Hericourt-Kidder disclose retrieving the set of IP routes is performed from an IP routes database, and wherein retrieving the set of IP routes from the IP routes database is in response to determining that the IP route entry is not present in the cache.

51. As per claim 35, Hericourt-Kidder disclose accessing a field in a record, the field to indicate one of plural techniques for downloading IP routes from routers to the DNS server; and based on the technique identified by the field, establish one or more sessions with the routers to download IP routes from the routers into an IP routes database in the DNS server, wherein retrieving the set of IP routes is performed from the IP routes database [Hericourt, traffic analyzer, col 17 line 22-col 18 line 2].

52. As per claim 36, Hericourt-Kidder disclose establishing one or more Border Gateway Protocol (BGP) sessions with the routers to download IP routes from the routers into the IP routes database, in response to the field indicating use of BGP retrieval [Hericourt, Proxy servers or firewall, Fig 2].

53. As per claim 39, Hericourt-Kidder disclose establishing one of plural different types of sessions corresponding to the one of plural techniques specified by the field to download IP routes from the routers into the IP routes database [Hericourt, FTP or Telnet, col 32 line 28].

54. Claims 15-17,19-24;40-48 and 25-28,49-53 contain similar limitations set forth in claims 1-4,6-12,14,29-36,39. Therefore claims 15-17,19-24;40-48 and 25-28,49-53 are rejected for the same rationale set forth in claims 1-4,6-12,14,29-36,39.

55. As per claims 5,18 Hericourt-Kidder disclose retrieving the set of IP routes from a set of routers using an SNMP protocol [Kidder, SNMP, col 13 lines 5-48].

56. As per claim 13, Hericourt-Kidder disclose defining an enhanced address resource record, including a domain name, a list of corresponding servers and routers, router retrieval parameters, a default client/server IP route, and timeouts [Kidder, domain name, col 13 lines 5-48].

57. As per claims 37, Hericourt-Kidder disclose establishing one or more Simple Network Management Protocol (SNMP) sessions with the routers to download IP routes from the routers into the IP routes database, in response to the field indicating use of Management Information Base (MIB) [Kidder, SNMP, col 13 lines 5-48].

58. As per claim 38, Hericourt-Kidder disclose establishing one or more Telnet sessions with the routers to download IP routes from the routers into the IP routes database, in response to the field indicating use of Telnet retrieval [Hericourt, Telnet, col 2 line 28].

Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner *Thong Vu*, whose telephone number is (571)-272-3904. The examiner can normally be reached on Monday-Thursday from 6:00AM- 3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, *Andrew Caldwell*, can be reached at (571) 272-3868. The fax number for the organization where this application or proceeding is assigned is 571-273-8300

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval IPAIRI system. Status information for published applications may be obtained from either Private PMR or Public PMR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see *http://pair-direct.uspto.gov*. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thong Vu
Primary Examiner
Art Unit 2142